

I claim:

1. An oxygen absorber comprising:

an iron powder, and

a first layer coated on a surface of the iron powder, said

5 first layer being formed of iron chloride.

2. An oxygen absorber according to claim 1, further comprising a matrix material filled with the iron powder covered with the first layer.

10

3. An oxygen absorber according to claim 1, wherein said iron powder is sponge iron powder with porous surface.

4. An oxygen absorber according to claim 1, wherein said iron
15 powder has an average diameter of less than 100 micrometers.

5. An oxygen absorber according to claim 1, wherein said iron powder is carbonyl iron powder with an average diameter of less than 20 micrometers.

20

6. An oxygen absorber according to claim 1, wherein said first layer is formed of at least one of anhydrous ferric chloride and ferrous chloride.

25 7. An oxygen absorber according to claim 1, wherein said first layer is coated on the iron powder such that a ratio of chloride to iron is 0.1% to 10% by weight.

30 8. An oxygen absorber according to claim 1, wherein said first layer has a thickness of less than 100 nm.

9. An oxygen absorber according to claim 2, wherein said matrix material is a plastic having a melting point of 80°C to 300°C.

10. An oxygen absorber according to claim 2, wherein said matrix material is filled with the iron powder at 50% to 90% by weight.
11. An oxygen absorber according to claim 1, further comprising
5 a second layer coated on the first layer formed on the surface of the iron powder and formed of iron chloride.
12. An oxygen absorber according to claim 11, wherein said second layer is formed of at least one of anhydrous ferric
10 chloride, ferrous chloride hexahydrate, ferrous chloride, and ferrous chloride tetrahydrate.
13. A method of manufacturing an oxygen absorber, comprising the steps of:
15 preparing iron powder, and forming a first layer formed of iron chloride on a surface of the iron powder.
14. A method of manufacturing an oxygen absorber according to
20 claim 13, further comprising the step of mixing the iron powder and a matrix material, melting the mixture of the iron powder and the matrix material, extruding the molten mixture into a strand, pelletizing the extruded strand, and molding the pellet into a predetermined shape.
25
15. A method of manufacturing an oxygen absorber according to claim 14, wherein said step of forming the first layer is performed by injecting hydrochloric acid or molten ferric chloride hexahydrate to react directly with the iron powder in
30 an extruder while melting the mixture of the iron powder and the matrix material.
16. A method of manufacturing an oxygen absorber according to claim 13, further comprising the step of forming a second layer

formed of iron chloride on the first layer formed on the surface of the iron powder.